WATER LINES

NEWS FROM THE WATER RESOURCES DIVISION

MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION ✦ MARCH 1995

MISSION: TO PROVIDE THE MOST BENEFIT, THROUGH THE BEST USE, OF THE STATE'S WATER RESOURCES FOR THE PEOPLE OF MONTANA

DEPARTMENT NEWS

RUBY RIVER WATER USERS WORK FOR SOLUTIONS

A group of ranchers and recreational water users are working together to improve the management of water resources in the Ruby River valley. DNRC Director Mark Simonich appointed the Ruby River Reservoir Task Force in October 1994 after a fish kill occurred in the Ruby River below the reservoir.

On September 1, 1994 the reservoir was completely drained and water flowing through the reservoir washed a large amount of sediment into the river. The Department of Fish, Wildlife, and Parks (DFWP) estimated that 10,000 to 15,000 fish were killed. Most of the dead fish were rainbow trout that had been washed out of the reservoir.

Fourteen members serve on the task force, including representatives of the following interests:

- Irrigators with contracts to purchase water from the Ruby River Reservoir
- Irrigators with decreed water rights that pre-date the reservoir
- Recreational water users and recreation-based businesses
- Persons interested in protecting the fishery
- DNRC, which owns the dam.

Goals of the task force are to develop by March 31,1995 the following:

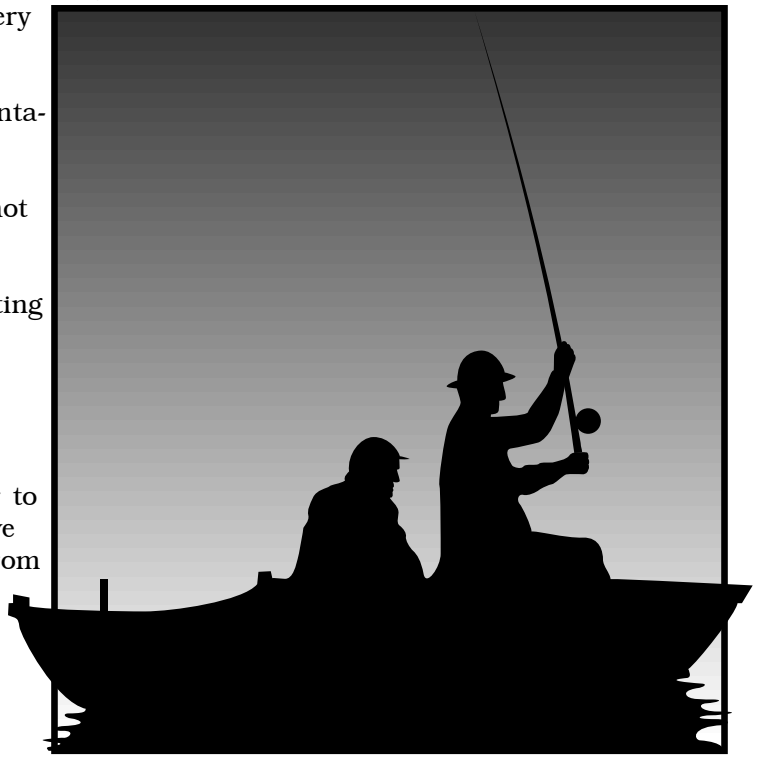
- Minimum reservoir pool size
- A river dewatering prevention plan
- Reservoir operation guidelines
- A water delivery plan
- A monitoring and implementation plan.

The group did not waste any time rolling up their sleeves and getting to work. On October 19, a group of Ruby valley ranchers and anglers worked together to help DFWP move rainbow trout from the Ruby River back into the reservoir.

In November, the task force developed a tentative plan for maintaining a minimum pool in the Ruby River Reservoir. The task force then began working on the dewatering prevention plan and the water delivery system.

Residents of the Ruby River valley have also been actively involved in the efforts of the task force. In addition to helping move the fish, residents have been attending and participating in task force meetings. Water users with decreed rights have organized to improve communication and have developed a proposed supplement to the dewatering prevention plan.

For more information on the Ruby River Task Force call Mary Vandenbosch at 444-6635.



DEPARTMENT NEWS

UPDATE ON WATER MEASUREMENT PROGRAM

The Water Measurement Program was established by the 1991 Legislature to encourage better management of our water resources by water users where chronic dewatering significantly impairs fisheries, agriculture, industrial, municipal, or recreational uses of the water. Under the program, the Department of Natural Resources and Conservation (DNRC) can require measuring and controlling devices for diversions on watercourses that are chronically dewatered. By requiring controlling and measuring devices on these diversions, the department can ensure that water users divert only the water to which they are entitled. These devices can also provide water users with an additional water management tool.

The first step in deciding whether or not to require controlling and measuring devices on a particular waterway is to hold public scoping meetings to gather local input. The DNRC water measurement specialist then researches the area and its history and produces a report which includes public comment and the department's decision. Although the water users are financially responsible for the measuring devices, some water user groups have applied for Renewable Resource Grants through the DNRC to finance purchase of the devices. If DNRC does require devices on a particular watercourse, the diversion owners or operators are required to install them within two years. The owners or operators are also required to periodically record and report water measurements to the department.

In 1993, DNRC asked interested individuals, organizations, and other agencies to compile a list of watercourses that might benefit from the installation of measuring and controlling devices. More than 150 suggested watercourses were screened and 10 were chosen as potential candidates for the program. Additional watercourse studies are planned as the program progresses.

Mill Creek in the Yellowstone Basin, One Horse Creek in the Bitterroot River Basin and Tenmile Creek in the Missouri River Basin have been evaluated by the Water Measurement Program. A final report for Mill Creek was written in 1993, and measuring and controlling devices were required for all diversions on the watercourse. Measuring devices on Mill Creek will protect a Department of Fish, Wildlife and Parks' water right lease and ensure higher instream flows to protect fisheries. Measuring devices were not required for One Horse Creek because the study showed that requiring them would not help water right holders or increase instream flows. Shortly after the initial scoping meeting for Tenmile Creek, the local water commissioner mandated measuring devices for all diversions and the study was discontinued. A draft study report recommending measuring devices for all Musselshell River diversions has been distributed for public review. Rock Creek in the Yellowstone River Basin and the Jefferson and Big Hole rivers are currently being evaluated.

For more info on the Water Resources Division Water Measurement Program call Seth Brandenberger at (406)444-6622.

NEWS FLASH

Water right forms are now available electronically through the State's computer bulletin board. Use your computer modem and dial 1-800-962-1729 or 444-5648 in Helena.

PEOPLE IN WATER

SONJA HOEGLUND IMPLEMENTS GIS PROGRAM FOR WATER RESOURCES

Sonja Hoeglund, a native of Culbertson, Montana, began working as the Water Resources Division's Geographic Information Systems (GIS) Specialist in mid-January, 1995. Sonja has a Bachelors Degree in Forestry and is completing work on a Master of Science Degree in Forestry specializing in GIS, at the University of Montana.

Most recently, Sonja worked at the University of Montana's School of Forestry as a research specialist working on a tax productivity project, a joint venture between the University and the Montana Department of Revenue.

As the Division's GIS Specialist, Sonja's first assignment is to work with the division's Planning Section on the Clark Fork Drainage Basin. Her second project will be producing a map of the Yellowstone Controlled Groundwater Closure Area for the Water Rights Bureau and the Bozeman Regional Office. The list of future projects is endless, and is matched by the potential benefit to Montana's water users!

We're happy to have Sonja on board and can't wait to use her expertise!

FARM GROUPS JOIN ENVIRONMENTALISTS IN IOWA WATERSHED PROJECT

DES MOINES, Iowa — In a cooperative move that might signal a new era of joint watershed management, environmental groups and agricultural interests have joined forces with a municipal water utility to improve the water supply of the Raccoon Riverin western Iowa. The effort involves establishing demonstration projects of soil and water management practices that could be applied on the 3½ million-acres of mostly farmland that makes up the Raccoon River watershed.

Spearheaded by the Iowa Natural Heritage Foundation and largely funded by the Northwest Area Foundation of St. Paul, Minn., the joint effort involves the Iowa Farm Bureau, Des Moines Water Works, Agribusiness Association of Iowa, and various farm commodity groups. The organizations will provide the services while the Northwest Area Foundation will put up $554,000 in funding for such demonstration projects as wetlands restoration and creation of grass buffer strips along streams, along with crop and feedlot management practices.

While the demonstration projects may not result in any immediately measurable improvement of the Raccoon River water supply, they nonetheless will serve as models for better management of the watershed, said Des Moines Water Works director L.D. McMullen. As the conservation practices become more popular, noted McMullen, some significant improvement may result in the quality of the river that supplies the drinking water needs of greater Des Moines.

McMullen noted that analyses of the river's water quality can actually indicate which herbicides and pesticides are popular with northwest Iowa farmers during a given growing season.

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SOUTHERN CALIFORNIA DROUGHT PLAN INCLUDES CONCEPT OF "TARGET MARKETING"

LOS ANGELES, Calif. — If drought conditions occur in southern California this year, there's likely to be more water trading going on than water rationing. Through a unique system of rewarding or penalizing its member agencies for their water use efficiency, the Metropolitan Water District of Southern California (MWD) has approved a drought management plan that seeks to avoid water rationing.

The drought plan, approved by the MWD board shortly before year end, sets base allocations for the district's 27 member agencies. The allocations are adjusted to reflect an individual agency's efforts to develop local water resources and to promote conservation. An agency that exceeds its allocation will either pay a penalty or seek out additional supplies from member agencies that don't use all of their allocations.

The purchase of unused allocations — which MWD is calling "target marketing" — was prohibited under the district's previous drought programs.

Target marketing was included in the plan in recognition of the need to minimize the impact of water shortages on the southern California region's economy, said Lester Snow, manager of the San Diego County Water Authority. Snow pointed out that San Diego County's local water supplies remain above average, allowing the authority to reduce purchases of imported water. This trend will likely continue through most of this year, he added.

The California Department of Water Resources has projected that allocations of the State's Water Project may total only 30 to 40 percent of requested amounts. Last year, allocations were half of that requested. A 30 percent allocation from the State Water Project, together with a full allocation from the Colorado River, would leave MWD about 10 percent short of the water it needs to meet anticipated demands. The district plans to make up the shortfall with water from other sources, including supplies stored in previous years for use during droughts.

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DEFORESTATION CREATES DROUGHT IN WETTEST SPOT OF THE WORLD

CHERRAPUNJI, India — Excessive rainfall, amounting to more that 500 inches last year, is both a "boon and a curse" to Cherrapunji, which is considered the wettest spot in the world. Despite the annual deluge, the Indian village continues to suffer from drought-like conditions since most of the trees and other vegetation in the area have been removed by deforestation that has grown to characterize wide expanses of the Third World.

The hilltop crowned by Cherrapunji was stripped of its rain forest decades ago. Village residents here walk miles to find drinking water and are limited to once-a-week baths. Crop irrigation is illegal. "Deforestation is taking place in a big way," said Suchendra Nath Deka, director of the regional meteorological center in Guwahati, located about 100 miles north of Cherrapunji. "When the trees and plants are removed, the water runs off immediately, and water shortages become a serious problem. As a result, excessive rainfall is both a boon and a curse to them."

According to a report by the U.S. Embassy in India, studies indicate that India is losing more than 3 million acres of forest cover each year.

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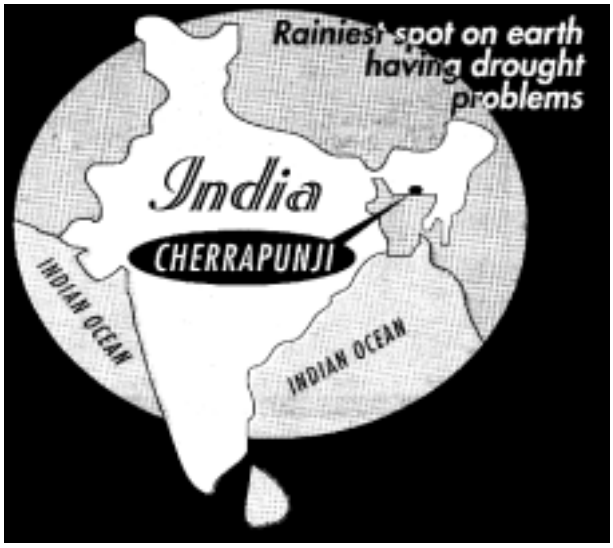

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